

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

J. BERNARD L. GEE, M.D. <i>Professor of Medicine, Yale University School of Medicine, New Haven, CT.</i>	Tissue matrix and phagocyte injury: relative contributions of proteases and oxidants
MICHAEL D. GERSHON, M.D. <i>Professor of Anatomy and Cell Biology, Co- lumbia University College of Physicians &amp; Surgeons, New York.</i>	Nicotine effects on neural development: a study of the accessible nervous system of the gut.
CHOU ZEN GIAM, PH.D. <i>Postdoctoral Fellow, National Institutes of Health, Bethesda, MD.</i>	Immunoglobulin enhancer elements in tissue specific gene expression
GORDON NELSON GILL, M.D. <i>Professor of Medicine, University of Cali- fornia, San Diego, La Jolla.</i>	Epidermal growth factor receptor gene in epi- dermoid carcinoma
GABRIEL C. GODMAN, M.D. <i>Professor of Pathology, Columbia Univer- sity College of Physicians &amp; Surgeons, New York.</i>	Cytoskeletal organization of the endothelial cell in regulation of shape contractility and surface movement
ALFRED L. GOLDBERG, PH.D. <i>Professor of Physiology, Harvard Medical School, Boston.</i>	Selective degradation of damaged cellular proteins
WILLIAM E. GOLDMAN, PH.D. <i>Assistant Professor of Microbiology and Immunology, Washington University School of Medicine, St. Louis, MO.</i>	Bordetella pertussis tracheal cytotoxin
CHARLES S. GREENBERG, M.D. <i>Assistant Professor of Medicine, Duke Uni- versity Medical Center, Durham, NC.</i>	Transglutaminases and atherosclerosis
MARK I. GREENE, M.D., PH.D. <i>Director of Immunobiology, University of Pennsylvania, Philadelphia.</i>	Suppressor cells in syngeneic tumor immunity
NOBUYOSHI HAGINO, M.D., PH.D. <i>Professor of Anatomy, University of Texas Health Science Center, San Antonio.</i>	Nicotine on prolactin secretion in develop- ment
LINDA M. HALL, PH.D. <i>Associate Professor of Genetics and Neuroscience, Albert Einstein College of Medicine of Yeshiva University, The Bronx, NY.</i>	Genetic differences in nicotine sensitivity in <i>Drosophila melanogaster</i> strains
RONALD G. HARVEY, PH.D. <i>Professor of Organic Chemistry, The Uni- versity of Chicago.</i>	Novel anticarcinogenic coumarins and flavones
HENRY D. HOBERMAN, M.D., PH.D. <i>Professor, Albert Einstein College of Medi- cine of Yeshiva University, The Bronx, NY.</i>	Reaction of aldehydes contained in cigarette smoke with hemoglobin
ROBERT M. HOFFMAN, PH.D. <i>Assistant Professor of Pediatrics in Resi- dence, University of California School of Medicine, San Diego, La Jolla.</i>	Methionine dependence, methylation and or- ganic transformation

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

RICHARD L. HUGANIR, Ph.D.  
*Assistant Professor, The Rockefeller University, New York.*

The nicotine acetylcholine receptor: regulation by protein phosphorylation

HAROLD P. JONES, Ph.D.  
*Assistant Professor of Biochemistry, University of South Alabama, Mobile.*

Calcium-dependent regulatory proteins and neutrophil activation

MICHAEL KARIN, Ph.D.  
*Associate Professor of Medicine, University of California School of Medicine, San Diego, La Jolla.*

Isolation and characterization of a heritable fragile site on human chromosome

MORRIS J. KARNOVSKY, M.B., B.Ch.  
*Shattuck Professor of Pathological Anatomy, Harvard Medical School, Boston.*

The molecular basis of pulmonary surfactant secretion by type II pneumocytes: studies in intact cells and a cell-free system

SIMON KARPATKIN, M.D.  
*Professor of Medicine, New York University Medical Center, New York.*

The role of platelets in tumor cell metastases

ROBERT W. KARR, M.D.  
*Assistant Professor of Medicine, University of Iowa, Iowa City.*

Development and differentiation of normal and leukemic monocytes

SHIRLEY L. KAUFFMAN, M.D.  
*Professor of Pathology, State University of New York, Downstate Medical Center, Brooklyn, NY.*

Oncogenes in chemical carcinogenesis

HEINZ KOHLER, M.D., Ph.D.  
*Director, Department of Molecular Immunology, Roswell Park Memorial Institute, Buffalo, NY.*

Multi-targeting with hybridomas on tumor cells

MARKKU KOSKENVUO, M.D.  
*Professor and Chairman, Department of Public Health Science, University of Helsinki, Helsinki, Finland.*

The Finnish Twin Cohort Follow-up Study

ROBERT H. KRETSINGER, Ph.D.  
*Professor of Biology, University of Virginia, Charlottesville.*

Crystallographic study of drug-calmodulin complexes

JAMES T. KURNICK, M.D.  
*Associate Pathologist, Massachusetts General Hospital, Boston.*

Lung cancer study of the *in situ* inflammatory response

JOSEPH LEIGHTON, M.D.  
*Professor of Pathology, Medical College of Pennsylvania, Philadelphia.*

Atypia and neoplasia of stratified epithelium in gradient culture

MICHAEL R. LIEBER, M.D., Ph.D.  
*Laboratory of Molecular Biology, National Institute of Arthritis, Diabetes and Digestive and Kidney Diseases, Bethesda, MD.*

Site specific recombination of antigen receptor genes

VALERIE K. LINDGREN, Ph.D.  
*Guest Researcher, National Cancer Institute, Bethesda, MD.*

Viral and cellular factors controlling papillomavirus transcripts

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

ZVI LIVNEH, PH.D. <i>Scientist, The Weizmann Institute of Science, Rehovot, Israel.</i>	Mechanism of S.O.S. error-prone repair
RICARDO V. LLOYD, M.D., PH.D. <i>Assistant Professor of Pathology, University of Michigan, Ann Arbor.</i>	Analysis of pituitary neoplasms with monoclonal antibodies
JOSEPH D. LOCKER, M.D., PH.D. <i>Assistant Professor of Pathology and Biochemistry, University of Pittsburgh School of Medicine.</i>	DNA methylation in neoplasia
RONALD J. LUKAS, PH.D. <i>Director, Laboratory of Neurochemistry, St. Joseph's Hospital and Medical Center, Phoenix, AZ.</i>	Influences of nicotine on neuronal expression of acetylcholine receptors
JAN M. LUNDBERG, M.D. <i>Assistant Professor of Pharmacology, The Karolinska Institute, Stockholm, Sweden.</i>	Sensory neuropeptides and smoke-induced irritation in the respiratory tract
HENRY T. LYNCH, M.D. <i>Professor and Chairman, Department of Preventive Medicine and Public Health, Creighton University School of Medicine, Omaha, NE.</i>	Genetic and biomarker studies of cancers of the respiratory tract, pancreas and urinary bladder
RICARDO B. MACCIONI, D.S.C. <i>Assistant Professor, University of Colorado Health Sciences Center, Denver.</i>	Regulation of microtubule assembly in normal and transformed cells
HOWARD S. MAKER, M.D. <i>Associate Professor of Neurology, Mount Sinai School of Medicine, New York.</i>	Nicotine action on brain neurotransmitters and in an animal model of Parkinson's disease
RICHARD A. MARKHAM, M.D. <i>Assistant Professor of Medicine and of Microbiology and Immunology, The Jewish Hospital of St. Louis, St. Louis, MO.</i>	T cell-mediated immunity to <i>Pseudomonas aeruginosa</i>
WALLACE L. MCKEEHAN, PH.D. <i>Senior Scientist, W. Alton Jones Cell Science Center, Inc., Lake Placid, NY.</i>	Endocrine control of human endothelial cell regeneration
EDGAR F. MEYER, JR., PH.D. <i>Associate Professor, Texas A&amp;M University, College Station.</i>	Structural studies of elastase
STELLA MITRANI-ROSENBAUM, PH.D. <i>Professor of Virology, Hebrew University-Hadassah Medical School, Jerusalem, Israel.</i>	Molecular analysis of human genital papilloma virus
DAVID A. MOSCATELLI, PH.D. <i>Research Assistant Professor, New York University Medical Center, New York.</i>	Angiogenic factor-endothelial cell interactions
FERID MURAD, M.D., PH.D. <i>Professor of Medicine and Pharmacology, Stanford University, Stanford, CA, and Chief of Medicine, Veterans Administration Medical Center, Palo Alto, CA.</i>	Mechanism of nitric oxide activation of guanylate cyclase Role of cyclic GMP in smooth muscle relaxation

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

- CHRISTOPHER MURLAS, M.D.  
*Assistant Professor of Medicine, University  
of Cincinnati, Cincinnati, OH.*
- JAY A. NADEL, M.D.  
*Professor of Medicine, Physiology and Ra-  
diology, Cardiovascular Research Institute,  
University of California, San Francisco.*
- MOON H. NAHM, M.D.  
*Assistant Professor of Pathology, Washing-  
ton University, St. Louis, MO.*
- SUSAN NAYLOR, Ph.D.  
*Associate Professor of Human Genetics,  
The University of Texas Health Science  
Center, San Antonio.*
- DONALD J. NELSON, Ph.D.  
*Associate Professor of Chemistry, Clark  
University, Worcester, MA.*
- JANET M. OLIVER, Ph.D.  
*Professor of Pathology, University of New  
Mexico School of Medicine, Albuquerque.*
- F. WILLIAM ORR, M.D.  
*Associate Professor of Pathology, Univer-  
sity of Manitoba, Winnipeg, Manitoba,  
Canada.*
- YOSHIO OSAWA, Ph.D.  
*Head, Department of Endocrine Biochem-  
istry, Medical Foundation of Buffalo, Buf-  
falo, NY.*
- MARY D. OSBAKKEN, M.D.  
*Assistant Professor of Anesthesia and  
Biochemistry/Biophysics, University of  
Pennsylvania, Philadelphia.*
- BEVERLY PAIGEN, Ph.D.  
*Children's Hospital Medical Center of  
Northern California, Oakland.*
- ISRAEL PECHT, Ph.D.  
*Professor of Chemical Immunology, The  
Weizmann Institute of Science, Rehovot,  
Israel.*
- DENNIS R. PETERSEN, Ph.D.  
*Professor of Pharmacology, University of  
Colorado School of Pharmacy, Boulder.*
- DANIEL E. PETTJOHN, Ph.D.  
*Professor of Biochemistry/Biophysics,  
University of Colorado, Denver.*
- EDGAR PICK, M.D., Ph.D.  
*Professor of Immunology, Tel Aviv Univer-  
sity, Tel Aviv, Israel.*
- Electromechanical properties of airway  
muscle
- Mechanisms of airway hyperreactivity
- Development of human B Cells
- Molecular and genetic analysis of small cell  
lung cancer
- Calmodulin interactions with target proteins  
and synaptic vesicles
- Regulation of the membrane oxidase of human  
polymorphonuclear leukocytes
- Role of local factors in pulmonary metastasis
- Aromatase inhibitors in cigarette smoke and  
tobacco
- <sup>31</sup>P NMR study of cardiac metabolism in health  
and disease
- Mapping genetic determinants of atheroscle-  
rosis susceptibility
- The role of Ca<sup>2+</sup> ions in basophil and mast-cell  
degranulation
- Implementation of the isolated perfused liver  
to study nicotine metabolism and metabolic  
interactions
- Role of specific cell surface carbohydrates in  
the development of human squamous lung  
carcinoma
- The biochemical basis of enhanced oxygen  
radical production by lymphokine-activated  
macrophages

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

JAMES M. PIPAS, Ph.D. <i>Assistant Professor, University of Pittsburgh</i>	Oncogenes active in colon cancer
SALVATORE V. PIZZO, M.D., Ph.D. <i>Associate Professor of Pathology, Duke University Medical Center, Durham, NC.</i>	Protease regulation and cellular metabolism
JULIA M. POLAK, D.Sc., M.D. <i>Senior Lecturer in Histopathology, Royal Postgraduate Medical School, Hammer-smith Hospital, London, England.</i>	Investigation of the role of regulatory peptides in human lung disease
RAMI RAHAMIMOFF, M.D. <i>Professor of Physiology, Hebrew University-Hadassah Medical School, Jerusalem, Israel.</i>	Humoral effects of small cell carcinoma of the lung on neuromuscular transmission
LOLA M. REID, Ph.D. <i>Associate Professor, Albert Einstein College of Medicine, The Bronx, NY.</i>	<i>In vitro</i> assay prediction of metastatic potential
JOHN E. REPINE, M.D. <i>Assistant Director, Webb-Waring Lung Institute; Associate Professor of Medicine, University of Colorado Health Sciences Center, Denver.</i>	Basic mechanisms of lung injury from inhaled oxidants
WARD RICHARD RICE, M.D., Ph.D. <i>Assistant Professor, University of Cincinnati, Cincinnati, OH.</i>	Neuropeptide hormone regulation of surfactant secretion
NADIA ROSENTHAL, Ph.D. <i>Children's Hospital, Boston, MA.</i>	Regulatory factors in muscle gene expression
HARRY RUBIN, Ph.D., D.V.M. <i>Professor of Molecular Biology, University of California, Berkeley.</i>	Adaptive vs. selective effects of alkylating agents
UNA S. RYAN, Ph.D. <i>Research Professor of Medicine, University of Miami School of Medicine, Miami, FL.</i>	Interactions of hormones with cells of the pulmonary vascular wall
JEFFREY D. SAFFER, Ph.D. <i>Associate Staff Scientist, The Jackson Laboratory, Bar Harbor, ME.</i>	HMG proteins in chromatin
AZIZ SANCAR, M.D., Ph.D. <i>Associate Professor of Biochemistry, University of North Carolina, Chapel Hill.</i>	Nucleotide excision repair
BRAHMI P. SANI, Ph.D. <i>Head, Protein Biochemistry, Southern Research Institute, Birmingham, AL.</i>	Selenium-binding proteins
REGINA M. SANTELLA, Ph.D. <i>Associate Professor of Medicine and Environmental Sciences, Columbia University, New York.</i>	Development of monoclonal antibodies to carcinogen-DNA adducts

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

B. V. RAMA SASTRY, D.Sc., Ph.D.  
*Professor of Pharmacology, Vanderbilt  
University School of Medicine, Nashville,  
TN.*

Maternal smoking and blood concentrations of  
amino acids in umbilical arteries and veins

Influence of nicotine on the release of acetyl-  
choline in the human placenta and its impli-  
cations on fetal growth.

H. WILLIAM SCHNAPER, M.D.  
*Adjunct in Pathology, The Jewish Hospital  
of St. Louis, MO.*

Biology of the lymphokine, soluble immune  
response suppressor (SIRS).

CHARLES H. SCOGGIN, M.D.  
*Head, Division of Clinical Applications;  
Associate Professor of Medicine, Univer-  
sity of Colorado Health Sciences Center,  
Denver.*

The somatic cell genetics of lung cancer

DAVID W. SCOTT, Ph.D.  
*Professor of Immunology, University of  
Rochester, Rochester, NY.*

Immune response to modified self-regulation  
of murine B lymphoma growth

ROBERT E. SCOTT, M.D.  
*Professor of Pathology, Mayo Clinic and  
Foundation, Rochester, MN.*

Commitment control and carcinogenesis in  
normal, preneoplastic and malignant hu-  
man epithelial cells

HENRY SERSHEN, Ph.D.  
*Research Scientist IV, Neurochemistry Di-  
vision, Nathan S. Kline Research Institute,  
Ward's Island, New York.*

Development of an animal model of Parkin-  
son's disease

JERRY W. SHAY, Ph.D.  
*Associate Professor, University of Texas  
Health Science Center, Dallas.*

Role of cytoplasmic elements in the induction  
and suppression of tumorigenicity

ISALAHU SHECHTER, Ph.D.  
*Senior Lecturer in Biochemistry, The  
George S. Wise Faculty for Life Sciences,  
Tel Aviv University, Tel Aviv, Israel.*

Effect of thiols and disulfides on cholesterol  
metabolism

KENDALL A. SMITH, M.D.  
*Professor of Medicine, Dartmouth Medical  
School, Hanover, NH.*

Dissection of the eukaryotic DNA replication  
pathway

STEVEN S. SMITH, Ph.D.  
*Assistant Research Scientist, Beckman Re-  
search Institute of the City of Hope, Duarte,  
CA.*

Selectivity of DNA methylation in normal and  
oncogenically transformed cells

MOHAN SOPORI, Ph.D.  
*Assistant Professor, University of Ken-  
tucky Medical Center, Lexington.*

Cigarette smoke-induced alteration of im-  
mune response

TIMOTHY A. SPRINGER, Ph.D.  
*Assistant Professor of Pathology; Chief,  
Laboratory of Membrane Immunochemis-  
try, Dana-Farber Cancer Institute, Boston.*

Studies of macrophage subpopulations and  
differentiation using monoclonal antibodies

ERIC J. STANBRIDGE, Ph.D.  
*Associate Professor of Microbiology, Uni-  
versity of California, Irvine.*

Transfer of specific individual human chromo-  
somes to recipient cells

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

THOMAS P. STOSSEL, M.D. <i>Chief, Medical Oncology Unit, Massachusetts General Hospital, Boston</i>	Functional anatomy of the lung macrophage
FLEUR L. STRAND, Ph.D. <i>Professor of Biology, New York University, New York</i>	Prenatal and postnatal effects of nicotine and ACTH peptides on neuromuscular development and motor behavior in rats
MAKOTO TAKETO, M.D., Ph.D. <i>Associate Staff Scientist, The Jackson Laboratory, Bar Harbor, ME</i>	Gene regulation in teratocarcinoma stem cells
DE LANSING TAYLOR, Ph.D. <i>Professor of Biology, Carnegie-Mellon University, Pittsburgh</i>	Chemotaxis of macrophages
JOSEPH CHARLES TAYLOR, Ph.D. <i>Associate Research Scientist, City of Hope Research Institute, Duarte, CA</i>	Ceruloplasmin abnormality in chronic obstructive pulmonary disease
JOHN A. THOMPSON, Ph.D. <i>Associate Professor of Pharmaceutical Chemistry, University of Colorado School of Pharmacy, Boulder</i>	Chromatographic separation and comparative metabolism of <i>d</i> - and <i>l</i> -nicotine
WAYNE M. TREBBIN, M.D. <i>Nephrologist, Roger Williams General Hospital, Providence, RI</i>	The effects of renal function on nicotine metabolism
EMIL R. UNANUE, M.D. <i>Chairman and Professor, Department of Pathology, Washington University School of Medicine, St. Louis, MO</i>	Physiopathology of normal and activated macrophages
HAROLD E. VARMUS, M.D. <i>Professor of Microbiology and Immunology, University of California, San Francisco</i>	Functional analysis of cellular oncogenes activated during tumorigenesis
PETER K. VOGT, Ph.D. <i>Professor and Chairman, Department of Microbiology, University of Southern California, Los Angeles</i>	New <i>ONC</i> genes from acute retroviral leukemias
HELEN VAIN NUNAKIS, Ph.D. <i>Professor of Biochemistry, Brandeis University, Waltham, MA</i>	Purification and properties of a soluble NAD(P) glycohydrolase isolated from the sponge, <i>M. prolifera</i>
PETER N. WALSH, Ph.D. <i>Professor of Medicine, Temple University School of Medicine, Philadelphia</i>	Interaction of platelets with coagulation factors IX and X
PETER A. WARD, M.D. <i>Professor and Chairman, Department of Pathology, The University of Michigan, Ann Arbor</i>	Oxygen-derived free radicals, immune complexes and tissue injury
GEORGE WEINBAUM, Ph.D. <i>Assistant Chairman for Research, Department of Medicine, The Graduate Hospital, Philadelphia</i>	The role of peptide methionine sulfoxide reductase in human lungs: a possible defense against protein oxidation and elastin degradation in smokers

**PRINCIPAL INVESTIGATOR  
OR INSTITUTION**

**PROJECT TITLE**

SAMUEL B. WEISS, PH.D.  
*Professor of Biochemistry and Microbiology, The University of Chicago.*

Sequence modifications in viral DNA by benz[a]pyrene metabolites

HOWARD G. WELGUS, M.D.  
*Assistant Professor of Medicine, Jewish Hospital at Washington University Medical Center, St. Louis, MO.*

Human macrophage collagenase and collagenase inhibitor

MICHAEL J. WELSH, M.D.  
*Assistant Professor of Medicine, University of Iowa College of Medicine, Iowa City.*

Mechanisms controlling ion transport in airway epithelia

ÅKE WENNMALM, M.D.  
*Professor and Chairman, Department of Clinical Physiology, University of Gothenburg, Gothenburg, Sweden.*

Nicotine as inhibitor of prostaglandin formation: localization of the inhibitory step and characterization of the cardiovascular implications

ALEXANDER S. WHITEHEAD, D.Phil.  
*Assistant Professor of Pediatrics, Children's Hospital, Boston.*

Mouse serum amyloid P component: a model acute phase reactant for the study of inflammation at the molecular level

PAUL V. WOOLEY, III, M.D.  
*Professor of Medicine and Pharmacology, Georgetown University Medical Center, Washington, DC.*

Effects of chemical carcinogens upon gene loci in the pancreas

STANLEY YACHNIN, M.D.  
*Professor of Medicine and Chief, Section of Hematology-Oncology, The University of Chicago Medical Center.*

Models for the pathogenesis of atherosclerosis. An biological effects of oxygenated sterol compounds, B<sub>6</sub> mevalonic acid and cholesterol biosynthesis and the biosynthesis and regulation of cell growth

DONALD A. YOUNG, M.D.  
*Professor of Medicine, University of Rochester, Rochester, NY.*

Papilloma virus proteins and cell transformation



## Grantees of Completed Projects

Following is a list of the principal investigators, or institutions, whose projects have been completed prior to the period covered in this Report. Several of the individuals named are deceased. The titles and affiliations listed were those in effect at the time the work was in progress.

- MARIO D. ACETO, Ph.D.  
*Associate Professor of Pharmacology, Medical College of Virginia, Virginia Commonwealth University, Richmond.*
- CLARENCE M. AGRESS, M.D.  
*Associate Clinical Professor of Medicine, University of California Medical Center, Los Angeles.*
- ANTHONY A. ALBANESE, Ph.D.  
*Director of Laboratories, The Burke Rehabilitation Center, White Plains, NY.*
- ANTHONY P. AMAROSE, Ph.D.  
*Instructor in Obstetrics and Gynecology, The Albany Medical College of Union University, Albany, NY.*
- E. T. ANGELAKOS, M.D., Ph.D.  
*Professor of Physiology, Boston University School of Medicine, Boston.*
- D. MURRAY ANGEVINE, M.D.  
*University of Wisconsin School of Medicine, Madison.*
- JOSEPH C. ARCOS, D.Sc.  
*Professor of Medicine, Tulane University School of Medicine, New Orleans, LA.*
- ALAN K. ARMITAGE, Ph.D.  
*Research Director, Hazleton Laboratories Europe, Harrogate, North Yorkshire, England.*
- MARILYN S. ARNOTT (RASCO), B.S.  
*Assistant Biologist and Assistant Professor of Biology, The University of Texas System Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston.*
- THOMAS M. AUNE, Ph.D.  
*Assistant Professor of Pathology, The Jewish Hospital of St. Louis, Mo.*
- DOMINGO M. AVIADO, M.D.  
*Professor of Pharmacology, University of Pennsylvania School of Medicine, Philadelphia.*
- STEPHEN M. AYRES, M.D.  
*Director, Cardiopulmonary Laboratory, Saint Vincent's Hospital, New York.*
- LESLIE BAER, M.D.  
*Associate Professor of Medicine, Columbia University College of Physicians & Surgeons, New York.*
- OSCAR J. BALCHUM, Ph.D.  
*Hastings Professor of Medicine, University of Southern California School of Medicine, Los Angeles.*
- SAMUEL BALK, M.D., Ph.D.  
*Pathologist, New England Deaconess Hospital, Boston.*
- FREDERIK B. BANG, M.D.  
*Professor and Chairman, Department of Pathobiology, The Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD.*
- A. CLIFFORD BARGER, M.D.  
*Robert Henry Pfeiffer Professor of Physiology, Harvard Medical School, Boston.*
- BRODA O. BARNES, M.D., Ph.D.  
*Professor (Affiliate) of Physiology, Colorado State University, Fort Collins.*
- FREDERICK W. BARNES, JR., M.D.  
*Associate Professor of Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD.*
- T. C. BARNES, D.Sc.  
*Research Scientist, Philadelphia State Hospital.*
- CARL G. BECKER, M.D.  
*Associate Professor of Pathology, Cornell University Medical College, New York.*
- R. FREDERICK BECKER, Ph.D.  
*Associate Professor of Anatomy and Director, Laboratory of Perinatal Science, Duke University Medical Center, Durham, NC.*
- RALPH S. BECKER, Ph.D.  
*Professor of Chemistry, University of Houston.*
- BENJAMIN BELL, M.D.  
*Director Emeritus, Normative Aging Study, Veterans Administration Outpatient Clinic, Boston.*
- SAMUEL BELLET, M.D.  
*Director, Division of Cardiology, Philadelphia General Hospital, Philadelphia.*